

## **Federal Operating Permit Article 1**

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: American Waste Industries, Incorporated

Facility Name: American Waste Industries, Inc.  
Facility Location: 508 East Indian River Road  
Norfolk, Virginia

Registration Number: 61038  
Permit Number: TRO61038

May 5, 2004  
Effective Date

May 5, 2009  
Expiration Date

\_\_\_\_\_  
(for)  
Director, Department of Environmental Quality

May 5, 2004  
Signature Date

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## **I. Facility Information**

### **Permittee**

American Waste Industries, Inc.  
508 East Indian River Road  
Norfolk, Virginia 23523

### **Responsible Official**

Mr. G. Elliot Schaubach, Jr.  
Chief Executive Officer

### **Facility**

American Waste Industries, Inc.  
508 East Indian River Road  
Norfolk, Virginia 23523

### **Contact Person**

Mr. G. Elliot Schaubach, Jr.  
Chief Executive Officer  
757-543-7110

**AFS Identification Number:** 51-710-00219

**Facility Description:** SIC Code [4953] – Medical and solid waste incineration facility (HMIWI facility). AWI operates two medical waste incinerators with dry sorbent injection controls, water quenching and fabric filter precipitate capture. The facility is currently in compliance with all applicable requirements and operates year round. Other emission units include a small package boiler and the necessary ash-handling operation.

**Incinerators** – AWI operates two Consumat Systems, Inc. model CS-760, controlled air pathological incinerators. The incinerators, located at AWI's Norfolk, Virginia facility, are operated 24 hours per day and 365 days per year. The incinerators were originally designed to combust medical waste only, however documents and trash are also burned on a contract basis. Each unit has a maximum waste capacity of 23.4 tons per day. The incinerators (INE-002 and INE-003) are considered to be existing equipment under state regulations and are therefore regulated under Article 4-44. A Federal Plan for HMIWI operations was proposed by the EPA on July 6, 1999 in the Federal Register. The plan proposed a set of emission guidelines for the operation of this type of facility and on September 14, 2000, the final rule became effective for all HMIWI facilities in the states and Indian country. For the moment, the Federal Plan takes precedence over Article 4-44. The Commonwealth of Virginia proposed a state plan under Sections 111 and 129 of the Clean Air Act and submitted the plan for approval in August of 2002. The state plan simply restates the Federal requirements for HMIWI operation and approval is pending. Both of the incinerators at American Waste fall into the 'Large' category, as delineated in the Federal Plan. The medical waste to be processed is fed to the incinerators in boxes or via trash carts at a rate of every 5-7 minutes.

The incinerators are dual chamber units with a primary and secondary stage. The primary stage is operated with minimum combustion air and a low interior velocity at a minimum of 1400 degrees F. The secondary stage is supplied with excess air and turbulent mixing zones to complete the combustion process at 1800 degrees F. The incinerators have been equipped with additional pollution control devices, besides the secondary combustion chamber. When the secondary chamber is referred to as a control device, the reference is 'afterburner'.

**Dry Scrubbing System** – In order to control the release of acid-gases to the atmosphere, dry sorbent has been applied to the incinerators to limit the emission of HCl gases produced in the combustion chambers. The sorbent creates a chemical reaction in the flue gas and effectively converts the acid gases to precipitates, or salts of the acids. The Federal Plan that was promulgated and the Commonwealth of Virginia plan was developed with identical applicable requirements. The state regulation designed for HMIWI facilities approximates this plan as Rule 4-44. In the rule, the operators of HMIWI facilities are required to meet certain control levels for several classifications of airborne pollutants. Specific target pollutants of this rule are PM, Carbon Monoxide, Dioxins/Furans, Hydrogen Chloride, Sulfur Dioxide, Nitrogen Oxides, Lead, Cadmium and Mercury. Dry scrubbing with sorbents is utilized, as necessary, to control Hydrogen Chloride and any other acid gases that may be present. The dry sorbent is sprayed into the turbulent zone in the flue gas chamber to react with any target pollutants to produce a solid precipitate. The spent sorbent will contain the target pollutants as they fall-out of the flue gas stream and are collected in the ash handling operation.

Other components of the dry scrubbing system include a water spray quench chamber, a lime reactor and fabric filters.

**Boiler** – AWI operates a 150 HP (5 million Btu/hour) boiler (BOE-001) to generate steam for cleaning equipment and waste containers. The boiler is a 'stand-alone' unit and is not part of the incinerator process. There is no distillate oil service connected to this boiler, so the only fuel burned at this time is natural gas.

**Ash Handling Operation** – Ash and other solid non-combustible material are collected from three distinct sources at the facility. They are the bottom ash which is generated from the burning of the trash, the flyash collected from the fabric filter and the spent sorbent from the pollution control device. The bottom ash is wetted as it exits the incinerators, is placed in hoppers and transported to a storage bin. The other materials, which includes flyash and the spent sorbent are transported by hopper to the storage bin and combined with the wet bottom ash. This process minimizes the occurrence of fugitive dust emissions at the site.

## II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Fuel Burning Equipment</b>							
INE-002	INS-002	Incinerator, Consumat CS-760	1950 lbs/hour	afterburner	INC-001	PM, CO, opacity	August 8, 2001
INE-002	INS-002	Incinerator, Consumat CS-760	1950 lbs/hour	dry scrubber system	INC-003	HCl, dioxins, furans and mercury	August 8, 2001
INE-002	INS-002	Incinerator, Consumat CS-760	1950 lbs/hour	cyclone scrubber	INC-003a	PM	August 8, 2001
INE-002	INS-002	Incinerator, Consumat CS-760	1950 lbs/hour	fabric filter	INC-003b	PM, lead, cadmium, mercury	August 8, 2001
INE-003	INS-002	Incinerator, Consumat CS-760	1950 lbs/hour	afterburner	INC-002	PM, CO, opacity	August 8, 2001
INE-003	INS-002	Incinerator, Consumat CS-760	1950 lbs/hour	dry scrubber system	INC-004	HCl, dioxins, furans and mercury	August 8, 2001
INE-003	INS-002	Incinerator, Consumat CS-760	1950 lbs/hour	cyclone scrubber	INC-004a	PM	August 8, 2001
INE-003	INS-002	Incinerator, Consumat CS-760	1950 lbs/hour	fabric filter	INC-004b	PM, lead, cadmium, mercury	August 8, 2001

\*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

### **III. Process and Fuel Burning Equipment Requirements – (emission unit ID# INE-002 and INE-003)**

#### **A. Limitations**

1. Particulate emissions, carbon monoxide and opacity from the incinerators shall be controlled by the direct flame afterburners. Hydrogen chloride emissions shall be controlled by dry scrubbing with sorbent. Mercury emissions shall be controlled by limiting the throughput of trash. Particulate emissions (including any precipitated HCl and dioxins/furans), lead, cadmium and mercury shall be controlled by fabric filters. The dry scrubbers and the fabric filters shall be provided with adequate access for inspection and shall be in operation whenever the incinerators are operating.  
(9 VAC 5-80-110, 40 CFR 62.14411 and Condition 4 of 8/8/2001 NSR Permit)
2. The approved auxiliary fuel for the secondary burners is natural gas. A change in the fuel may require a permit to modify and operate.  
(9 VAC 5-80-110 and Condition 9 of 8/8/2001 NSR Permit)
3. **Throughput** – Each incinerator unit shall be charged with no more than 1460 pounds per hour of hospital/medical/infectious waste and/or solid waste (3-hour rolling average). The July 2002 stack test showed compliance with the emission limits, established the maximum and minimum parameters for compliance and indicated that the sorbent flow for both dioxins/furans and mercury was zero when the throughput of waste to each incinerator was limited to a maximum of 1460 pounds per hour.  
(9 VAC 5-80-110, 9 VAC 5-40-6180, 40 CFR 62.14490, Condition 7 of 8/8/2001 NSR Permit including Attachment A to the NSR permit.)
4. **Trained and Qualified Operator** – The permittee must have a fully trained and qualified operator, either at the facility or able to be at the facility within 1 hour. The trained and qualified HMIWI operator may operate the HMIWI directly or be the direct supervisor of one or more HMIWI operators.  
(9 VAC 5-80-110, 9 VAC 5-40-6150 A, 40 CFR 62.14420 and Condition 13 (g) & (h) of 8/8/2001 NSR Permit.)
5. **Review Program** – The permittee must establish a program for reviewing the information listed in 40 CFR 62.14424 annually with each HMIWI operator.
  - a. Initial reviews of the information listed in 40 CFR 62.14424 must be conducted by February 15, 2001, or prior to assumption of responsibilities affecting HMIWI operation, whichever is later
  - b. Subsequent reviews of the information shall be conducted annually.  
(9 VAC 5-80-110, 9 VAC 5-40-6150 H & I and 40 CFR 62.14425)

6. **Waste Management Plan** – All HMIWI owners or operators must have a waste management plan. The plan for AWI must be submitted to the DEQ Tidewater Regional Office within 60 days of permit issuance.  
(9 VAC 5-80-110, 9 VAC 5-40-6160 and 40 CFR 62.14430 & 14431)
7. **Shutdown** – For the incinerator operation, shutdown must commence no less than two hours after the last charge of hospital/medical/infectious waste is charged to the unit.  
(9 VAC 5-80-110, 9 VAC 5-40-6010 C, 40 CFR 62.14490 and Condition 8 of 8/8/2001 NSR Permit)
8. **Maximum/Minimum Operating Parameters** - The following site-specific operating parameters will be established during an initial emissions test and will be utilized to determine compliance with the emission limits for the incinerator units:
  - a. Maximum charge rate.
  - b. Maximum fabric filter inlet temperature.
  - c. Minimum secondary chamber temperature.
  - d. Minimum dioxin/furan sorbent flow rate.
  - e. Minimum hydrogen chloride sorbent flow rate.
  - f. Minimum mercury sorbent flow rate.

Excerpts of the test reports (initial and subsequent ones) which include these maximum/minimum-operating parameters are included as Attachments A to the NSR permit beginning with the initial test report. The parameters above are considered valid for compliance purposes now that the stack test has verified all of the applicable emission limits below.  
(9 VAC 5-80-110, 9 VAC 5-40-6200, 40 CFR 60.14455, Condition 5 of 8/8/2001 NSR Permit and Attachment A)
9. **Applicable Regulations** - This facility is subject to the regulations for Hospital, Medical and Infectious Waste Incineration facilities in the Federal Plan Requirements at 40 CFR 62, Subpart HHH, and in Article 4-44 (9 VAC 5-40-6000 to 6230 of State Regulations). At such time as the EPA approves the 'State Plan', then this 'State Plan' for HMIWI operation will supersede the Federal Plan.  
(9 VAC 5-80-110, 9 VAC 5-40-6000 to 6230, 40 CFR 62.14400-14495 and Condition 3 of 8/8/2001 NSR Permit)



10. **Emission Limits** - Emissions from the operation of the incinerator exhaust stack shall not exceed the limits specified below:

**PM** 0.015 grains/dscf (@12% CO<sub>2</sub> or 7% O<sub>2</sub>)

Use of the bypass stack other than during startup, shutdown or malfunction constitutes a violation of the PM emission limit.

**Carbon Monoxide** 40 ppmvd 1-hr avg (@12% CO<sub>2</sub> or 7% O<sub>2</sub>)

Simultaneously operating above the maximum charge rate and below the minimum secondary chamber temperature (3 hour rolling averages) constitutes a violation of the CO limit.

**Dioxin/Furans** 55 grains/1x10<sup>9</sup> dscf (@12% CO<sub>2</sub> or 7% O<sub>2</sub>)  
or 1.0 grains/1x10<sup>9</sup> std. cubic feet TEQ\*

\*(TEQ is the toxic equivalency of all congeners of dioxins/furans)

The stack test of July 2002 establishes a zero lbs per hour sorbent flow rate for the control of dioxins and furans. Use of the bypass stack other than during startup, shutdown, or malfunction constitutes a violation of the dioxin/furans emission limit.

**Hydrogen Chloride** 100 ppmv 1-hr avg, or 93 % reduction  
(@12% CO<sub>2</sub> or 7% O<sub>2</sub>)

Simultaneously operating above the maximum charge rate and below the minimum HCl sorbent rate (3 hour rolling average) constitutes a violation of the HCl emission limits. Use of the bypass stack other than during startup, shutdown, or malfunction constitutes a violation of the hydrogen chloride emission limit.

**Sulfur Dioxide** 55 ppmv 1-hr avg (@12% CO<sub>2</sub> or 7% O<sub>2</sub>)

**Nitrogen Oxides** 250 ppmv 1-hr avg (@12% CO<sub>2</sub> or 7% O<sub>2</sub>)  
(as NO<sub>2</sub>)

**Lead** 0.52 grains/1000 dscf, or 70% reduction  
(@12% CO<sub>2</sub> or 7% O<sub>2</sub>)

Use of the bypass stack other than during startup, shutdown or malfunction constitutes a violation of the lead emission limit.

**Cadmium** 0.07 grains/1000 dscf, or 65% reduction  
(@12% CO<sub>2</sub> or 7% O<sub>2</sub>)

Use of the bypass stack other than during startup, shutdown or malfunction constitutes a violation of the cadmium emission limit.

**Mercury** 0.24 grains/1000 dscf, or 85% reduction  
(@12% CO<sub>2</sub> or 7% O<sub>2</sub>)

Use of the bypass stack other than during startup, shutdown or malfunction constitutes a violation of the mercury emission limit.

The stack test of July 2002 establishes a zero lbs per hour sorbent flow rate for the control of mercury emissions.

These emission limits under this article apply at all times except during periods of startup, shutdown, or malfunction, provided that no hospital waste or medical/infectious waste is charged to the affected facility during shutdown or malfunction.

(9 VAC 5-40-6020 to 9 VAC 5-40-6100 & 6180 B, 40 CFR 62.14411, Condition 10 of 8/8/2001 NSR Permit and Attachment A)

11. **Visible Emission Limit** - Visible Emissions from the incinerator stack shall not exceed 10 percent opacity (six-minute block average) as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction, provided no waste is charged during startup, shutdown or malfunction.

(9 VAC 5-50-80, 9 VAC 5-50-260, 9 VAC 5-40-6110, 40 CFR 62.14412 and Condition 11 of 8/8/2001 NSR Permit)

12. **Limit for Fugitive Dust/Emissions, Odor and Toxic Pollutants** – The provisions of Articles 1, 2, and 3 of 9 VAC 5 Chapter 40 (Emission Standards for Fugitive Dust/Emissions, Odor and Toxic Pollutants) apply.

(9 VAC 5-40-6120, 6130, 6140 and Condition 12 of 8/8/2001 NSR Permit)

## **B. Monitoring**

1. **Monitoring Devices and Methods** – The owner of an affected facility shall install, maintain and operate devices for monitoring the applicable maximum and minimum operating parameters as listed in Condition III.A.8. These devices shall measure and record the values of these operating parameters at the frequencies indicated in Table 3 of 40 CFR Part 62, Subpart HHH at all times except during periods of startup or shutdown provided that no hospital waste or medical/infectious waste is charged to your HMIWI during periods of shutdown or malfunction. The owner of an affected facility shall install, maintain, and operate a device or method for measuring the use of the bypass stack at all times, including date, time, and duration.

(9 VAC 5-80-110, 9 VAC 5-40-6180 M, 40 CFR 62.14454 and Condition 6 & 16 of 8/8/2001 NSR Permit)

2. **Monitoring for Visible Emissions** – The permittee shall perform a weekly visual evaluation on the combined stack during normal operations. If such visual observation indicates any visible emissions, the permittee shall take corrective action to eliminate the visible emissions. If such corrective action fails to eliminate visible emissions, the permittee shall conduct a visible emissions evaluation (VEE) using 40 CFR 60, Appendix A, Method 9 for six minutes. If the six-minute VEE opacity average exceeds 5%, the VEE shall continue for an additional twelve minutes. If any of the six-minute averages during the 18 minutes exceeds 10%, the VEE shall continue for one hour from initiation, to determine compliance with the opacity limit. The permittee shall record the details of the visual emissions observations, the VEE and any corrective actions.

(9 VAC 5-80-110 E)

3. **Monitoring Equipment** – The owner of an affected facility shall obtain monitoring data at all times during HMIWI operations except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the affected facility is combusting hospital waste and medical/infectious waste or both.

(9 VAC 5-80-110, 9 VAC 5-40-6180 M, 40 CFR 62.14454 and Condition 17 of 8/8/2001 NSR Permit)

### **C. Recordkeeping**

1. **On Site Records** - The owner of an affected facility shall maintain the following information, emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Tidewater Regional Office. A three-hour rolling average shall be calculated for HMIWI charge rates, fabric filter inlet temperature, sorbent rate for HCl and the secondary chamber temperatures. These records shall include, but are not limited to:
  - a. Records of the following, including the calendar dates of each record.
    - (1) HMIWI charge dates, times and weights plus hourly charge rates;
    - (2) Fabric filter inlet temperatures during each minute of operation;
    - (3) Amount and type of dioxin/furan sorbent used during each hour of operation;
    - (4) Amount and type of mercury sorbent used during each hour of operation;
    - (5) Amount and type of HCl sorbent used during each hour of operation;
    - (6) Secondary chamber temperatures recorded during each minute of operation;

- (7) Records indicating use of the bypass stack, including dates, times and durations;
- b. Identification of calendar days for which data on emission rates or operating parameters specified under (a.), above, have not been obtained, with an identification of the emission rates or operating parameters not measured, reasons for not obtaining the data, and a description of corrective actions taken;
  - c. Identification of calendar days, times and durations of malfunctions, a description of malfunction and the corrective action taken;
  - d. Identification of calendar days for which data on emission rates or operating parameters specified under (a.), above, exceeded the applicable limits, including any limits on simultaneous operating conditions specified in Condition III.A.10, with a description of the exceedances, reasons for such exceedances, and a description of corrective actions taken;
  - e. The results of the initial, annual and any subsequent emissions tests conducted to determine compliance with the emission limits or to establish operating parameters, in accordance with the Source Testing Report Format, as attached;
  - f. Records showing the names of HMIWI operators who have completed review of the information in 40 CFR 62.14420-14425 and in 9 VAC 5-40-6150 H as required by 9 VAC 5-40-6150 I, including the date of the initial review and all subsequent annual reviews;
  - g. Records showing the names of the HMIWI operators who have completed the HMIWI operator training requirements, including documentation of training and the dates of the training;
  - h. Records showing the names of the HMIWI operators who have met the criteria for qualification under 40 CFR 62.14421-14423 and 9 VAC 5-40-6150 and the dates of their qualification;
  - i. Records of calibration of any monitoring devices as required under 40 CFR 62.14460 and 9 VAC 5-40-6180 M 1 and 2;

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110, 9 VAC 5-40-6190, 40 CFR 62.14460-14465 and Condition 13 of 8/8/2001 NSR Permit)

#### D. Testing

1. **Annual Emissions Testing Requirement** – HMIWI facilities shall be tested annually to determine compliance with the opacity limit, PM, CO and HCl emission limits. The annual performance test shall be conducted no more than 12 months following the previous performance test using the applicable procedures and test methods listed in 40 CFR 62.14452. If all performance tests over a 3-year period indicate compliance with the emission limit for a pollutant (PM, CO or HCl), you may forego a performance test for that pollutant for the next two years. At a minimum, you must conduct a performance test for PM, CO, and HCl every third year (no more than 36 months following the previous performance test). If such performance test conducted every third year indicates compliance with the emission limit for a pollutant (PM, CO, or HCl), you may forego a performance test for that pollutant for an additional two years. If any performance test indicates noncompliance with the respective emission limit, you must conduct a performance test for that pollutant at least annually until all annual performance tests over a 3-year period indicate compliance with the emission limit.  
(9 VAC 5-50-30, 9 VAC 5-40-6180 D(2), 9 VAC 5-40-6200, CFR 62.14451, 9 VAC 5-80-110 and Condition 14 of 8/8/2001 NSR permit)
2. **Repeat Emissions Tests** – The owner of an affected facility may conduct a repeat emissions test within 30 days of exceedance of applicable operating limitations to demonstrate that the affected facility is not in violation of the applicable emission limits. Repeat emissions tests conducted pursuant to 40 CFR 62.14455 (f) and 9 VAC 5-40-6180 I. shall be conducted using the identical operating parameters that indicated an exceedance of the limitation. The owner of an affected facility may conduct a repeat emissions test at any time to establish new values for the operating parameters. The Board may request a repeat emissions test at any time.  
(9 VAC 5-40-6180 F, I, and K, 40 CFR 62.14455 (f), 9 VAC 5-80-110 and Condition 15 of 8/8/2001 NSR permit)
3. If testing is conducted in addition to the monitoring specified in this permit, the results of such testing shall not be acceptable under this permit unless the permittee uses the following methods in accordance with procedures approved by the DEQ:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
HCl	EPA Method 26
dioxin/furans	EPA Method 23
NO <sub>x</sub>	EPA Method 7
SO <sub>2</sub>	EPA Method 6
Pb, Cd, Hg	EPA Method 29
CO	EPA Method 10 or 10B
PM/PM-10	EPA Methods 5, 29
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

**E. Reporting** – The owner of an affected facility shall submit the information specified below to the EPA Administrator:

1. The information listed in 40 CFR 62.14463(a) through (c) and in C1 through C3 of 9 VAC 5-40-6190, as part of the initial emissions test requirements. The initial test reports have been submitted in accordance with the regulations.
2. A semiannual report shall be submitted six months following the submission of the initial performance test report. Subsequent reports shall be submitted for reporting periods ending each June 30<sup>th</sup> and December 31<sup>st</sup> and within 6 months following the previous report. The semiannual report is due within 60 days of the end of the semiannual reporting period and shall include the following information:
  - a. The highest maximum operating parameter and the lowest minimum operating parameter, as applicable, for each operating parameter recorded for the six-month operating period being reported, pursuant to 40 CFR 62.14453 and 9 VAC 5-40-6180 E.
  - b. The highest maximum operating parameter and the lowest minimum operating parameter, as applicable for each operating parameter recorded pursuant to 40 CFR 62.14453 and 9 VAC 5-40-6180 E for the operating period preceding the period being reported, in order to provide the Board with a summary of the performance of the affected facility over a one-year (12 month) period.
  - c. Any information recorded under 40 CFR 62.14460 (c) through (e) and 9 VAC 5-40-6190 for the six-month period being reported.
  - d. Any information recorded under subdivisions 40 CFR 62.14460 (c) through (e) for the operating period preceding the six-month period being reported, in order to provide the Board with a summary of the performance of the affected facility over a one-year (12 month) period.
  - e. If an emissions test was conducted during the reporting period, the results of that test.
  - f. If no exceedances or malfunctions occurred during the six-month period being reported, a statement that no exceedances occurred during the reporting period.
  - g. Any use of the bypass stack, the duration, reason for the malfunction and corrective action taken; and

3. The owner of an affected facility shall submit semiannual reports containing any information recorded under 40 CFR 62.14463 (a) through (e) and B3 through B5 of 9 VAC 5-40-6190 no later than 60 days following the reporting period. The first semiannual reporting period begins on the day of the initial stack test and ended June 30, 2002, which was within six months of the submission of information in 40 CFR 62.14451 (a), as applicable and in subsection C of 9 VAC 5-40-6190. Subsequent reports shall be submitted for six-month reporting periods ending each year on June 30<sup>th</sup> and December 31<sup>st</sup>. The facilities manager (as defined in 40 CFR 62.14490) shall sign all reports.
4. All records specified under 40 CFR 62.14460 and 9 VAC 5-40-6190 shall be maintained on-site in either paper copy or computer-readable format, unless an alternative format is approved by the board.  
(9 VAC 5-40-50, 9 VAC 5-80-110, 9 VAC 5-40-6190, 40 CFR 62.14460 – 62.14465 and Condition 18 of 8/8/2001 NSR permit)

**F. Notifications** – The permittee shall furnish written notification to the Tidewater Regional Office of the anticipated date of performance tests of the incinerators postmarked at least 30 days prior to such date.

Copies of the written notification are to be sent to:

Associate Director  
Office of Air Enforcement (3AP10)  
U. S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

(9 VAC 5-50-50 and Condition 19 of 8/8/2001 NSR permit)

#### **IV. Facility Wide Conditions**

All of the facility wide conditions have been included in Section III.

## V. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
BOE-001	natural gas-fired boiler	5-80-720 C.2.a	SO <sub>2</sub> , NO <sub>x</sub> , PM <sub>10</sub> , CO, VOC	5 mmBtu/hour
AHE01	Ash handling process	5-80-720 B.1.	PM <sub>10</sub>	emissions < 0.5 tons

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

## VI. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Storage Vessels	Subpart Kb has been amended to exempt those storage vessels previously subject to recordkeeping requirements only.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.  
(9 VAC 5-80-140)



## **VII. General Conditions**

### **A. Federal Enforceability**

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

### **B. Permit Expiration**

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless a timely and complete renewal application consistent, with 9 VAC 5-80-80, has been submitted, to the Department, by the owner, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

### C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
  - a. The date, place as defined in the permit, and time of sampling or measurements.
  - b. The date(s) analyses were performed.
  - c. The company or entity that performed the analyses.
  - d. The analytical techniques or methods used.
  - e. The results of such analyses.
  - f. The operating conditions existing at the time of sampling or measurement.  
(9 VAC 5-80-110 F)
2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.  
(9 VAC 5-80-110 F)
3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
  - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
  - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
    - (1) Exceedance of emissions limitations or operational restrictions;
    - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
    - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."
- (9 VAC 5-80-110 F)

#### **D. Annual Compliance Certification**

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. The identification of each term or condition of the permit that is the basis of the certification.
3. The compliance status.
4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incidence of non-compliance.
5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)  
U. S. Environmental Protection Agency, Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

(9 VAC 5-80-110 K.5)

#### **E. Permit Deviation Reporting**

The permittee shall notify the Director, Tidewater Regional Office within four daytime business hours, after a deviation is discovered from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition VII.C.3. of this permit.  
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

#### **F. Failure/Malfunction Reporting**

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after a deviation is discovered from permit requirements, notify the Director, Tidewater Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Tidewater Regional Office.  
(9 VAC 5-20-180 C)

#### **G. Severability**

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.  
(9 VAC 5-80-110 G.1)

#### **H. Duty to Comply**

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.  
(9 VAC 5-80-110 G.2)

**I. Need to Halt or Reduce Activity not a Defense**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

**J. Permit Modification**

A physical change in or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-190 and 9 VAC 5-80-260)

**K. Property Rights**

The permit does not convey any property rights of any sort, or any exclusive privilege.

(9 VAC 5-80-110 G.5)

**L. Duty to Submit Information**

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.

(9 VAC 5-80-110 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.

(9 VAC 5-80-110 K.1)

**M. Duty to Pay Permit Fees**

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.

(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

## **N. Fugitive Dust Emission Standards**

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-50-90)

## **O. Startup, Shutdown, and Malfunction**

At all times, including periods of startup, shutdown, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20E and 9 VAC 5-40-20 E)

**P. Alternative Operating Scenarios**

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110 J)

**Q. Inspection and Entry Requirements**

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

**R. Reopening For Cause**

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

#### **S. Permit Availability**

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

#### **T. Transfer of Permits**

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.  
(9 VAC 5-80-160)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.  
(9 VAC 5-80-160)
3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.  
(9 VAC 5-80-160)

#### **U. Malfunction as an Affirmative Defense**

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
  - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.



- b. The permitted facility was at the time being properly operated.
  - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
  - d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
- 3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
  - 4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.  
(9 VAC 5-80-250)

#### **V. Permit Revocation or Termination for Cause**

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.  
(9 VAC 5-80-260)

#### **W. Duty to Supplement or Correct Application**

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.  
(9 VAC 5-80-80 E)

## **X. Stratospheric Ozone Protection**

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.  
(40 CFR Part 82, Subparts A-F)

## **Y. Asbestos Requirements**

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emissions Standards for Asbestos, as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).  
(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

## **Z. Accidental Release Prevention**

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.  
(40 CFR Part 68)

## **AA. Changes to Permits for Emissions Trading**

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.  
(9 VAC 5-80-110 I)

## **BB. Emissions Trading**

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.  
(9 VAC 5-80-110 I)

## **VIII. State-Only Enforceable Requirements**

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

1. 9 VAC 5-50-140 Standard for Odorous Emissions

2. 9 VAC 5-60-320 Standard Toxic Pollutants

(9 VAC 5-80-110 N and 9 VAC 5-80-300)